

a. Water Hyacinth Education Program

Applicant: Bryan J. Young, Sacramento Regional County Sanitation District

b. Project Description and Primary Biological/Ecological Objectives

The Stone Lakes water hyacinth control effort is an ongoing project intended to eradicate water hyacinth from the Stone Lakes Basin (SLB) and prevent the expansion of this destructive weed. The Stone Lakes Water Hyacinth Control Group (SLWHCG), comprised of government agencies, land owners and local businesses, operated from 1996 to 1998 through Sacramento County emergency funds and contributions from group members. While SLWHCG efforts have substantially reduced hyacinth in the Basin, widespread control throughout the Delta can only occur by informing the public of the deleterious effects of the invasive plant, and calling for public action to cease the spread of the plant. The Sacramento Regional County Sanitation District (SRCSD) is now seeking CALFED funding for an educational program, which the District intends to lead on behalf of the SLWHCG.

The hyacinth now occupying SLB and other Delta tributaries is spreading at an alarming rate. However, SLWHCG education and public outreach efforts, combined with a comprehensive control program, aims to reduce the transport of hyacinth throughout the region, and eradicate water hyacinth in SLB. After the competitive, dense hyacinth is removed, ecologically essential native plants upon which many organisms depend will return, and oxygen levels will substantially increase. The program aims to expand habitat, and increase food resources (e.g., invertebrates) for all Delta fish species and migratory birds. The SLWHCG program will continue to prevent the expansion of this fast-growing plant into habitats of concern including instream aquatic and shaded riverine aquatic which are in danger of being ecologically damaged and eventually lost due to the high siltation rates caused by this plant.

c. Approach/Tasks/Schedule

Members of the local community, who are unaware of the destructive potential of hyacinth, often inadvertently spread the plant. Hyacinth transport causes the continuous spread of the plant, and the re-infestation of areas where eradication has already occurred. Once the public is informed, control efforts will be more effective.

As soon as funds are available, SLWHCG will develop a color flyer which will describe the deleterious effects of hyacinth, offer advice on prevention of its dispersal, and present photos and identification characteristics. The flyer will be based on a temporary flyer developed by SLWHCG (Appendix A). Throughout Sacramento County, bait shops, marinas, boat stores and aquatic plant retailers have pledged their assistance in dispersing the flyer. The U.S. Fish and Wildlife Service (USFWS) and the SRCSD will present displays and materials at weekend tours and annual public events at the Stone Lakes National Wildlife Refuge (SLNWR). SRCSD will host a "Water Hyacinth Alert" web page which will feature information similar to that contained in the flyer.

Most local nurseries still sell water hyacinth for use in ponds. The plant quickly outgrows a pond environment, and some pond owners, unaware that the plant is destructive, dump the plants in local waterways. SLWHCG members will meet with nursery owners to discuss the effects of hyacinth on the natural waterways, and encourage them to either cease the sale of the plants or inform buyers of the risks of improper disposal.

d. Justification for Project and Funding by CALFED

Prior to 1996, approximately 35% of the Stone Lakes Basin's water surface was covered with hyacinth. In 1996, SLWHCG treated five large mats which covered approximately 50 acres of the Southern Pacific Borrow Channel. The mats are now completely dissolved and plant density adjacent to the banks has been significantly decreased. It is now apparent that a potential exists for the complete

eradication of hyacinth in the SLB. Last year the Department of Boating and Waterways (DBW) treated 17,000 acres of water hyacinth throughout the Delta. However, eradication cannot be completed without the cooperation of the community. If the public is not informed of the danger of hyacinth the plant will continue to be spread throughout the Delta.

e. Budget Costs and Third Party Impacts

Budget costs: The SRCSD is requesting \$9,600 from the CALFED program. This amount accounts for SRCSD's cost to run a three-year education program which includes 1) development, printing and distribution of flyers, 2) correspondence with local nursery owners, and 3) monitoring and reporting. Other components of the education program for which CALFED funding is not being sought, including the web page and event displays, will be supported by SRCSD. Other participants of the SLWHCG have volunteered to supplement the SRCSD public outreach efforts by distributing flyers.

Third Party Impacts: Since this program consists of education and voluntary action, no third party impacts are foreseen.

f. Applicant Qualifications

The SRCSD applicant, Bryan J. Young, is a licensed Pest Control Advisor and State Certified Applicator for aquatic situations. He has supervised a successful SRCSD water hyacinth eradication program, developed numerous integrated pest management programs for other noxious weeds, and acted as the SLWHCG project coordinator for over two seasons.

Other members of the SLWHCG have special qualifications and experience related to hyacinth control. The majority of the program's activities will be performed by SRCSD employees working under the applicant's supervision. These employees have been actively educating visitors to SLNWR by familiarizing visitors with the plant, explaining its effects on the Delta, and demonstrating how its transport may be avoided. SRCSD staff created a display booth and temporary flyer for annual SLNWR events. SRCSD employees have performed extensive research on water hyacinth, and examined public outreach programs in other states where government agencies are battling hyacinth.

g. Monitoring and Data Evaluation

Success of the education program will include an evaluation of 1) the number of waterway users contacted, either directly through tours and display booths, or indirectly through flyers, and 2) the degree of approbation of nursery owners. All activities will be summarized and distributed to the funding agency and SLWHCG members for review and comments.

h. Local Support/Coordination with other Programs/ Compatibility with CALFED Objectives

The SLWHCG includes representatives of government agencies, local businesses and private landowners who are concerned with problems of hyacinth in Delta waters. SLWHCG efforts are coordinated with those of DBW which is attempting to control hyacinth in water bodies throughout the Delta region. Local support for the project is widespread, with land owners, agencies, and local businesses having much to gain from the eradication of this destructive weed. Letters of support are included in Appendix B. Local marinas, boat shops, and aquatic plant nurseries have volunteered to dispense educational materials. SRCSD staff have already started to compile a list of those in the business community who are willing to participate (Appendix C). These education efforts will be coordinated with those of DBW. DBW sends a "Boater Alert" flyer with every boater registration.

The hyacinth eradication program meets CALFED goals by promoting public action to preserve the aquatic environment. Hyacinth may always exist within the waters of the Delta system; therefore, a standardized long-term education/eradication policy is an essential component of the CALFED program. In the Ecosystem Restoration Project Plan (ERPP), Vol. II, CALFED designated control of water hyacinth as a priority for the Sacramento-San Joaquin Delta Ecological Zone (page 59-60). The control of water hyacinth in the Stone Lakes-Snodgrass Slough-Lower Cosumnes/Mokelumne complex was designated as part of the vision for the North Delta Ecological Unit (page 28).